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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,489	09/10/2003	John Geoffrey Chan	9039X	3453

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EXAMINER

CHIN, RANDALL E

ART UNIT PAPER NUMBER

1744

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/659,489

Applicant(s)

CHAN, JOHN GEOFFREY

Examiner

Randall Chin

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 02182005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

Upon reconsideration, a new ground of rejection has been made as set forth below.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 3-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klemas '660.

With respect to claim 1, the patent to Klemas '660 discloses in Figs. 1 and 6 an electric toothbrush, comprising a handle defined by tubular housing 10 and head portion 13 having a cavity, a head defined by shaft of tool 44 (Fig. 6), a flexible neck 39 extending between said handle comprising two materials 41, 42, one being a rubber (polymer 42), a movable bristle carrier (bristle arrangement with concave element at distal end of tool 44 in Fig. 6) disposed on said head, a motor 17 disposed within said cavity, and a shaft 40 disposed within said flexible neck and operatively connected to said movable bristle carrier and to said motor. As for the recitation in claim 1 that the neck can flex at least about 5 degrees when a force of at least about 4 N is applied to said head, such a recitation is not deemed to define allowable subject matter because such a requirement can merely depend on the type of material which the neck is comprised of. Clearly, Klemas' neck 39 appears to deflect a sufficient amount or degree

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upon force (Fig. 6). In any case, one skilled in the art would find it obvious to provide for the optimum amount of neck flexure upon force to permit optimal cleaning of the oral cavity by merely selecting appropriate materials for the neck. As for neck comprising a second polymer, it should be noted that Klemas recites that inner shell 41 is made of a "soft pliable material such as brass, tin, etc." (col. 3, lines 23-25). It is the Examiner's position that one skilled in the art would find it obvious to make shell 41 of a second polymer as opposed to brass or tin which were merely exemplary in the first place since Klemas already recites that shell 41 should be a "soft pliable material." Clearly, one skilled in the art would find it obvious to provide for some type of elastomeric material for shell 41 for flexibility as opposed to brass or tin since it is well known that elastomeric materials (polymers) exhibit good pliability characteristics and are soft. Further, one skilled in the art would find it obvious to provide for a "channel" in the head by modifying the integral tool arrangement 44 (Fig. 6) such that a detent/socket arrangement of the tool is provided for instead as shown in alternative embodiments (Figs. 3 and 5, for example) for the purpose of enabling detachable connection of the head for replacement reasons. Thus, the socket 38 as shown in Fig. 5 can also be considered a "channel" in the head as is now recited in claim 1.

As for claims 3, 4, 5, 6 and 7, it is the Examiner's position that one skilled in the art would find it obvious to provide for the claimed ranges of Shore A hardness of the second polymer as well as the claimed weight ratio of the first polymer to the second polymer since discovery of optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

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As for claims 8 and 9, one skilled in the art would find it obvious to select the claimed one of the claimed polymers as such materials are well known in the art for their flexibility characteristics.

As for claims 10, 11 and 12, for the reasons just mentioned above for claim 1, the degree or angle of neck flexure with respect to a longitudinal axis of the toothbrush prior to being displaced is not deemed to be of any patentable moment here. Further, the terms "reversibly laterally" (claim 10), "reversibly rearwardly" (claim 11) and "reversibly forwardly" (claim 12) are deemed merely relative here, particularly, in view of Klemas' arrangement as shown in Fig. 6.

As for claim 13, Klemas' flexible shaft in Figs. 6 or 7 is deemed to also be a "ribbon."

As for claims 14 and 15, it is the Examiner's position that one skilled in the art would find it obvious to make the channel or neck elliptical in shape or for that reason, any other shape such as circular, oval, polygonal, etc. for aesthetic or design purposes. Geometrical changes in shape are deemed well within the level of ordinary skill.

### ***Conclusion***

3. Applicant's arguments with respect to claims 1 and 3-15 have been considered but are moot in view of the new ground(s) of rejection.

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4. Any inquiry concerning this communication or earlier communication from the Examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The Examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Robert Warden, can be reached at (571) 272-1281. The number for Technology Center 1700 is (571) 272-1700.

The central fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



R. Chin



Randall Chin  
Primary Examiner  
Art Unit 1744